



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/701,494   | 11/06/2003  | Jae-Won Lee          | 033808-006          | 7628             |
| 21839  | 7590        | 04/02/2009           | EXAMINER            |                  |
| BUCHANAN, INGERSOLL & ROONEY PC<br>POST OFFICE BOX 1404<br>ALEXANDRIA, VA 22313-1404 |             |                      |                     | BORSETTI, GREG   |
| ART UNIT   |             | PAPER NUMBER         |                     |                  |
| 2626   |             |                      |                     |                  |
|  |             |                      | NOTIFICATION DATE   | DELIVERY MODE    |
|  |             |                      | 04/02/2009          | ELECTRONIC       |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/701,494             | LEE ET AL.          |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | GREG A. BORSETTI       | 2626                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 16 March 2009.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-4 and 7-11 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-4 and 7-11 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____ .                        |

**DETAILED ACTION**

1. Claims 1-4, and 7-11 are pending.
2. Claims 1 and 7 have been amended.

***Continued Examination Under 37 CFR 1.114***

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/16/2009 has been entered.

***Drawings***

4. The drawings filed on 3/16/2009 are accepted by the examiner.

***Claim Objections***

5. Claim 10 and 11 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 10 and 11 have been incorporated into independent claims 1 and 7, respectively. However, claims

10 and 11 have not been subsequently canceled and thus do not further limit parent claims 1 and 7.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-4, and 7-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As per independent claims 1 and 7, there is no description in the claim language as to what a “basic telephone action” comprises. For the purposes of examination, a basic telephone action will be interpreted as sending a transmission.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 14, 7, and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nagai** et al. (US Patent # 6636587) in view of **Finnie** et al. (US Patent #6920216).

As per claim 1, **Nagai** discloses a third-party call control type simultaneous interpretation system, comprising:

a CTI (Computer-Telephony Integration) board for establishing a traffic channel between a talker and a listener (column 6 lines 52-57);

a CTI control module for generating an event in response to a button signal input through the CTI board to control the CTI board as a job unit comprising CTI control functions for performing a basic telephone action (column 18 line 67 – column 2 line 15, *the PBX/ACD control program detects a transmission from the outside, for example from a telephone, and informs the system execution management program of the detection of the transmission message (generates an event). The system then starts the telephony agent program in order to send the transmission to the receiver (basic telephone action). Since the transmission originated from a telephone, it is inherent that the event was generated in response to a button signal input through the CTI board*);

an interpretation module for recognizing a voice of the talker/listener input through the CTI board and translating the voice into a predetermined language (column 8 lines 62-67 and column 9 lines 14-15, *the system recognizes an incoming voice with*

*ASR processing board, then uses a program stored in memory to perform language translation); and*

a main control module for controlling an action of the CTI control module in accordance with a predetermined interpretation scenario that includes a current state conversion action selected according to a current state and in response to the event generated in the CTI module and a basic telephone action to be executed at a next state (column 18 line 67 – column 21 line 65, *the system execution management program (main control module) controls the telephony agent program and the PBX/ACD program (part of the CTI control module), where the telephony agent program routes a transmission, for example to the receiver's telephone (basic telephone action), that satisfies contact conditions (predetermined interpretation scenario) based on the coincident contact adjustment state (current state conversion action) and the PBC/ACD program detection and notification of receipt of a transmission message*).

wherein the main control module includes an interpretation scenario management section for selecting the current state conversion action and the basic telephone action for the next state in accordance with the predetermined interpretation scenario when the event is generated in the CTI module, and a state conversion section for converting the current state into the next state in response to the current state conversion action selected by the interpretation scenario management section (column 18 line 67 – column 21 line 65, *the system execution management program uses a contact manager (interpretation scenario management section) which includes user contact information indicating contact conditions (predetermined interpretation*

*scenario), such as the sending and receiving devices. Once the PBX/ACD program provides a notification of a received transmission (event), the system execution management program uses the contact manager and the telephony agent program to determine the contact conditions and check for needed media conversions, depending on the sending and receiving devices and the type of message received, before forwarding the transmission to the receiver (telephone action for the next state).*

**Nagai** fails to teach, but **Finnie** teaches:

wherein, since the CTI control functions are configured as a job unit, basic telephone actions can be made in accordance with only one job unit without individually and repeatedly calling the CTI control functions. (**Finnie**, column 3, lines 38-43, ...*The software ACD includes capabilities to translate from one or more complex commands issued by the business application to one or more corresponding primitive commands that the switch or packet telephony environment can decode and execute...*

Furthermore, column 4, lines 63-67, ...*The primary function of ACD 302 is to decompose such complex call connection, routing and queuing functions into a sequence of primitive functions that a switch 303 or other telephone environment is capable of executing... Therefore, a single call is made for a complex call connections and it is decomposed into a sequence of primitive functions.)*

It would have been obvious to combine **Finnie** with the **Nagai** device to be able to connect upper level functions with a robust set of CTI commands and functions that invoke both and control both the primitive call control functions of the telephony

equipment as well as the enhanced ACD (automatic call distributor) functions implemented by the disclosed software ACD. (**Finnie**, column 3, lines 26-43)

As per claim 4, **Nagai** discloses the system as claimed in claim 1, wherein the interpretation module comprises a speech recognition section for recognizing the voice input through the CTI board and converting the recognized voice into text (column 8 lines 62-67 and Figure 3 item 308);

a translation section for translating the text into the predetermined language (column 9 lines 14-15);

and a speech synthesis section for synthesizing a speech from the text recognized through the speech recognition section or the text translated through the translation section and outputting the synthesized speech (column 8 lines 59-61).

As per amended claim 7, **Nagai** discloses a third-party call control type simultaneous interpretation method, comprising the steps of:

a telephone connection step of establishing a traffic channel between a talker and a listener when the talker connects with a simultaneous interpretation system (column 6 lines 52-57);

an automatic interpretation step of, when an event is generated in a CTI control module in response to a button signal input by the talker or listener through a CTI board to control the CTI board as a job unit comprising CTI control functions for performing a basic telephone function, translating an input voice of the talker or listener into a predetermined language in response to the generated event based on a predetermined interpretation scenario (column 8 lines 62-67 and column 9 lines 14-15, *the system recognizes an incoming transmission message, detected by the PBX/ACD program, and recognizes a voice using the ASR processing board, then uses a program stored in memory to perform language translation (an event), where the transmission message, including the recognized voice, is processed according to contact conditions (predetermined interpretation scenario))*; and

an interpretation transmission step of controlling the CTI board in accordance with the interpretation scenario and transmitting the translated voice to the other party in accordance with the interpretation scenario, wherein the predetermined interpretation scenario includes a current state conversion action selected according to a current state and in response to the event generated in the CTI module and a basic telephone action to be executed at a next state (column 8 lines 62-67 and column 9 lines 14-15, *the system recognizes an incoming voice with the ASR processing board then uses a program stored in memory to perform language translation; the translation and transmission message type is determined based on the requested media type at the receiver which was previously registered and stored in memory, and the transmission message detected by the PBX/ACD program (predetermined interpretation scenario))*.

wherein the transmission step includes selecting the current state conversion action and the basic telephone action for the next state in accordance with the predetermined interpretation scenario when the event is generated in the CTI module, and converting the current state into the net state in response to the selected current state conversion (column 18 line 67 – column 21 line 65, *the system execution management program uses a contact manager (interpretation scenario management section) which includes user contact information indicating contact conditions (predetermined interpretation scenario), such as the sending and receiving devices. The contact manager is used by the system execution management program and the telephony agent program to determine the contact conditions and check for needed media conversions, depending on the sending and receiving devices and the type of message sent, before forwarding the transmission to the receiver (telephone action for the next state).*

**Nagai** fails to teach, but **Finnie** teaches:

wherein, since the CTI control functions are configured as a job unit, basic telephone actions can be made in accordance with only one job unit without individually and repeatedly calling the CTI control functions. (**Finnie**, column 3, lines 38-43, ...*The software ACD includes capabilities to translate from one or more complex commands issued by the business application to one or more corresponding primitive commands that the switch or packet telephony environment can decode and execute...* Furthermore, column 4, lines 63-67, ...*The primary function of ACD 302 is to*

*decompose such complex call connection, routing and queuing functions into a sequence of primitive functions that a switch 303 or other telephone environment is capable of executing... Therefore, a single call is made for a complex call connections and it is decomposed into a sequence of primitive functions.)*

It would have been obvious to combine **Finnie** with the **Nagai** device to be able to connect upper level functions with a robust set of CTI commands and functions that invoke both and control both the primitive call control functions of the telephony equipment as well as the enhanced ACD (automatic call distributor) functions implemented by the disclosed software ACD. (**Finnie**, column 3, lines 26-43)

As per claim 10, claim 1 is incorporated and **Nagai** fails to teach, but **Finnie** teaches:

wherein the CTI control module carries out basic telephone actions in accordance with only one job request, without individually and repeatedly calling CTI control functions. (**Finnie**, column 3, lines 38-43, ...*The software ACD includes capabilities to translate from one or more complex commands issued by the business application to one or more corresponding primitive commands that the switch or packet telephony environment can decode and execute... Furthermore, column 4, lines 63-67, ...The primary function of ACD 302 is to decompose such complex call connection, routing and queuing functions into a sequence of primitive functions that a switch 303 or other telephone environment is capable of executing... Therefore, a single call is made for a complex call connections and it is decomposed into a sequence of primitive functions.)*

It would have been obvious to combine **Finnie** with the **Nagai** device to be able to connect upper level functions with a robust set of CTI commands and functions that invoke both and control both the primitive call control functions of the telephony equipment as well as the enhanced ACD (automatic call distributor) functions implemented by the disclosed software ACD. (**Finnie**, column 3, lines 26-43)

Claim 11 is rejected for the same reasons as claim 10 for having similar limitations.

8. Claims 2, 3, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nagai** in view of **Kishinsky** (6,286,033).

As per claim 2, **Nagai** discloses the system as claimed in claim 1, wherein the CTI control module comprises an event handler for generating the event in response to the button signal input through the CTI board (column 18 line 63 – column 19 line 65 and column 17 lines 19-21, *the system send notification of a received transmission (event) and routes the transmission from a source to a receiver, through the PBX or telephone switchboard, using various contact means, including a telephone. Since a user indicates the number to be called, i.e. the receiver, by pushing buttons on the telephone, it is inherent that a button is pushed*);

and a working section for calling the CTI control functions in a given order from the CTI API and performing the basic telephone action in accordance with the main

control module (column 9 lines 32-33 and Figure 3 item 317, *the system execution management program controls the operation of sub-programs in the CTI server*).

However **Nagai** does not explicitly disclose a CTI API (Application Programming Interface) including CTI control functions for the CTI board. **Kishinsky** discloses a system for computer-integrated telephony (CTI) that uses an application-programming interface (column 4 lines 38-39) as an interface between the software and the platform. **Kishinsky** discloses the distribution of CTI scripts between telecommunications centers, including telephone call processing and switching centers, and is therefore analogous art.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the known technique of using API as an interface between the application software and the application platform in **Nagai**, since it would provide the user with a set on instructions enabling quick and easy access to a platform from a wide range of software applications.

As per claim 3, **Nagai** in view of **Kishinsky** discloses the system as claimed in claim 2, and **Nagai** further discloses wherein the basic telephone action includes one or more of phone dialing (column 18 lines 14-15), phone answering, phone disconnection or hanging up, button pressing (column 18 lines 39-41), button reading, tone detection, voice forward, voice store, speaking and listening.

As per claim 8, **Nagai** discloses the method as claimed in claim 7, wherein the automatic interpretation step comprises: recognizing the voice and translating the recognized voice into the predetermined language through an interpretation module in accordance with the predetermined interpretation scenario (column 8 lines 62-67 and column 9 lines 14-15, *the system recognizes an incoming voice with ASR processing board then uses a program stored in memory to perform language translation, the translation determined based on the requested media type at the receiver which was previously registered and stored in memory*).

**Nagai** does not explicitly disclose recording the input voice of the talker or listener in response to the event based on the predetermined interpretation scenario when the event is generated in the CTI control module in response to the button signal input by the talker or listener through the CTI board. However, **Nagai** does disclose that a groupware control program collects information, such as sender address, telephone number etc., and saves it in the work memory (column 19 lines 19-25). This suggests that input data can be stored for later processing.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to record the user or talkers voice in response to an event in **Nagai**, sine it would enable the system to store vocal input for future processing, preventing the loss of vocal input information when the system cannot process the input in real time.

As per claim 9, **Nagai** in view of **Kishinsky** discloses the method as claimed in claim 9,

and **Nagai** further discloses wherein the translating step comprises: recognizing the recorded voice and converting the recognized voice into text (column 8 lines 62-67); translating the text into the predetermined language (column 9 lines 14-15); and synthesizing a speech from the translated text (column 8 lines 59-61).

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to PTO-892, Notice of References Cited for a listing of analogous art.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREG A. BORSETTI whose telephone number is (571)270-3885. The examiner can normally be reached on Monday - Thursday (8am - 5pm Eastern Time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHMOND DORVIL can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 2626

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg A. Borsetti/  
Examiner, Art Unit 2626

/Talivaldis Ivars Smits/  
Primary Examiner, Art Unit 2626

3/26/2009